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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,480	11/28/2000	Dave McDysan	RIC00044	7587
25537	7590	11/06/2008		
VERIZON PATENT MANAGEMENT GROUP 1320 North Court House Road 9th Floor ARLINGTON, VA 22201-2909			EXAMINER  BATES, KEVIN T	
			ART UNIT	PAPER NUMBER
			2456	
			NOTIFICATION DATE	DELIVERY MODE
			11/06/2008	ELECTRONIC

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/723,480  
Filing Date: November 28, 2000  
Appellant(s): MCDYSAN ET AL.

\_\_\_\_\_  
Phouphanomketh Ditthavong  
Reg. No. 44658  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 29, 2008 appealing from the Office action mailed August 29, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

The applications listed by the applicants, 09/723,481 and 09/723,501 either have appeal briefs filed with the office or have already had examiner's answers submitted and relate to similar issues at this application.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6606319	Albert et al.	8-2003
5115432	Haas	5-1992
6055561	Feldman et al.	4-2000
5027269	Grant et al.	5-1991
6651096	Gai et al.	11-2003
6680943	Gibson et al.	6-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claims 1-4, 7-9, 12-13, 17, 20-24, 27-28, 31-32, 36, and 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Albert (6606316).**

**Regarding claims 1 and 21**, Albert teaches a method of communication in, a network access system including an external processor and a programmable access device (Figure 2A, where the PAD is the forwarding agent and the external processor is the service manager), said method comprising:

receiving a control message from the external processor to the programmable access device to establish a configuration of the programmable access device (Column 6, lines 40 – 46);

receiving, by the programmable access device, messages from a first network external to the network access system via a first network interface (Column 6, lines 24 – 27);

communicating a first subset of the received messages from the programmable access device to the external processor for service processing in accordance with the configuration (Column 6, lines 46 – 50; Column 9, lines 14 – 20); and

routing a second subset of the received messages not communicated to the external processor from the network access system via a second network interface different from the first network interface to a second network external to the first network access system, wherein the second network is different from the first network (Column 6, lines 44 – 48).

**Regarding claim 40**, Albert teaches a distributed router comprising:

a first network interface through which packets are communicated with a first network (Figure 2B, element 260);

a second network interface different from the first network interface through which packets are communicated with a second network different from the first network (Figure 2B element 258);

a programmable access device configured to input messages from the first network via the first network interface (Column 6, lines 24 – 27); and

an external processor configured to receive, from the programmable access device, a first portion of the input messages and to transmit a control message to the programmable access device specifying a configuration to control the selection of the first subset (Column 6, lines 46 – 50; Column 9, lines 14 – 20),

wherein the programmable access device forwards a second portion of the input messages not received by the external processor for routing via the second network interface to the second network (Column 6, lines 44 – 48).

**Regarding claim 2 and 22**, Albert teaches that transmitting a control message comprises transmitting a filter control message to establish a configuration of a packet header filter in the programmable access device (Column 8, lines 62 – 65); and communicating messages comprises communicating network messages filtered from a packet flow by the packet header filter of the programmable access device (Column 12, lines 48 – 62).

**Regarding claim 3 and 23**, Albert discloses limiting communication of network messages from the programmable access device to the external processor by sending the programmable access device a message setting message interface flags in the programmable access device (Figure 12A and 12B).

**Regarding claims 4 and 24**, Albert teaches transmitting a control message comprises transmitting a monitor control message to establish a configuration of a monitor in the programmable access device; and communicating messages comprises communicating reporting messages from the programmable access device to the external processor in response to the configuration of the monitor (Column 6, lines 40 – 53).

**Regarding claim 7 and 27**, Albert teaches transmitting a control message comprises transmitting a policer control message to establish a configuration of a policer in the programmable access device (Column 6, lines 40 – 53).

**Regarding claims 8 and 28**, Albert teaches transmitting a control message comprises transmitting a forwarding table control message to establish a configuration of a forwarding table in the programmable access device (Column 12, lines 48 – 62).

**Regarding claim 9**, Albert teaches establishing a configuration of a forwarding table comprises establishing a new forwarding table in the programmable access device (Column 8, lines 62 – 65).

**Regarding claim 12 and 31**, Albert teaches teaches transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device comprises transmitting a control message specifying a source from which packets are not to be accepted; and the method further comprises dropping packets from the specified source by the programmable access device (Column 9, lines 14 – 16).

**Regarding claim 13 and 32**, Albert teaches indicate that in response to service processing by the external processor, injecting a packet from the external processor into packet flow through the programmable access device (Column 9, lines 21 – 28).

**Regarding claim 17 and 36**, Albert teaches the method of claims 1 and 21, wherein receiving a control message comprises accessing a control processor on the external processor via an application programming interface (Column 10, lines 1 – 4).

**Regarding claims 20 and 39**, Albert teaches transmitting a control message comprises transmitting a control message via an intermediate communication network (Column 9, lines 36 – 47).

**Claims 5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert in view of Haas (5115432).**

**Regarding claim 5 and 25,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate transmitting a monitor control message comprises transmitting a control message to establish a threshold number of allowed retransmissions.

Haas teaches that an access device's configured policy should include a retransmissions policy (Column 7, lines 45 – Column 8, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Haas' teachings of a retransmission policy on Albert's network node reconfiguration system in order to give the network management a tool to help reduce congestion in the system and obtain optimal performance (Column 7, lines 58 – 61).

**Claims 16, 18, 35, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert in view of Feldman (6055561).**

**Regarding claims 16, 18, 35, and 37,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate exchanging keepalive and acknowledgment messages between the external processor and the programmable access device.

Feldman discloses a network system with network nodes and teaches acknowledgement and keepalive messages are communicated between the nodes (Figure 5; Column 9, line 65 – Column 10, line 11).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Feldman's teaching of keepalive messages and acknowledgements in Albert's system in order to know that the communication paths are still open and the communications are being received (Column 9, line 65 – Column 10, line 11).

**Claims 19 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert in view of Grant (5027269).**

**Regarding claims 19 and 38,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate that in response to failure of a service controller servicing the session in the external processor.

Grant discloses a system for failure recovery where in the detection of failure in a system where data is lost (Column 4, lines 42 – 51) sending a request for state of a session information (Column 4, line 67 – Column 5, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Grant's teaching in Albert in order to allow the external processor to recover the data that was lost as result of a fault (Column 2, lines 46 – 65).

**Claims 10-11 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert in view of Gai (6651096).**

**Regarding claim 10 and 29,** Cohen teaches the method of claims 1 and 21.

Albert does not explicitly indicate transmitting a control message comprises transmitting a control message to establish a configuration of a scheduler and one or more associated output buffers in the programmable access device.

Gai discloses a system for controlling the configuration of an access device that includes making configuration changes to a scheduler and has one or more output queues (Column 6, lines 19 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gai's teaching of configuration a scheduler on an access device in Albert's system in order to ensure QoS treatments for data flows (Column 6, lines 18 – 21).

**Regarding claim 11 and 30,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate transmitting a control message comprises transmitting a shaper control message to establish a configuration of a shaper in the programmable access device.

Gai discloses transmitting a control message comprises transmitting a shaper control message to establish a configuration of a shaper in the programmable access device (Gai, Column 6, lines 19 – 30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gai's teaching of configuration a scheduler on an access device in Albert's system in order to ensure QoS treatments for data flows (Column 6, lines 18 – 21).

**Claims 6, 14-15, 26, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert in view of Gibson (6680943).**

**Regarding claim 6 and 26,** Albert teaches the method of claims 4 and 24.

Albert does not explicitly indicate transmitting a monitor control message comprises transmitting a threshold activity level.

Gibson teaches a network node remotely configured that includes configuring a session to have a guaranteed quality of service, which gives a minimum threshold of activity to a connection session (Column 9, lines 32 – 37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gibson's teachings on Albert's system in order provide users with guaranteed service, especially for applications such as video and voice.

**Regarding claim 14 and 33,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device comprises transmitting a session deletion control message; and the method further comprises the programmable access device deleting a session specified by the session deletion control message

Gibson discloses transmitting a control message from the external processor to the programmable access device to establish a configuration of the programmable access device comprises transmitting a session deletion control message; and the method further comprises the programmable access device deleting a session specified by the session deletion control message because it discloses starting a session (INVITE) and deleting (tearing down or cancelling) a session (BYE and CANCEL) where these messages go from the control node to the access device (Gibson, Figure 3, Column 12, lines 7 – 14; Column 12, line 65 – Column 13, line 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gibson's teachings on Albert's system in order provide users with guaranteed service, especially for applications such as video and voice.

**Regarding claim 15 and 34,** Albert teaches the method of claims 1 and 21.

Albert does not explicitly indicate that the external processor signals network hardware to establish a network connection in response to receipt of a message from the programmable access device

Gibson discloses the external processor signaling network hardware to establish a network connection in response to receipt of a message from the programmable access device (Gibson, Column 9, lines 32 – 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gibson's teachings on Albert's system in order provide users with guaranteed service, especially for applications such as video and voice.

#### **(10) Response to Argument**

With regards to claims 1, 21, and 40, *the Appellants argue that Albert does not teach "a different first and second networks and different first and second network interfaces."* See pg 9 of appellant's brief.

**In response**, the examiner respectfully submits:

Using claim 1 as an exemplary embodiment, the claimed invention, in part, recites the flow of packets through a described network system. Packets flow into the system through a first network to a first network interface by the programmable access device. From the programmable access device, a first subset of packets gets sent to an external processor. A second subset of packets, sent from a second interface of the programmable access device, gets sent onto a second network. The appellant directs his argument only to the idea of the second subset of packets not being transmitted to a second network.

Figure 2A of Albert is the best example of the described system the examiner is relying upon.

Packets travel into the system from the clients (201-203) through a first network (210) to the forwarding agent (231). See Col. 6, lines 24—27. From the forwarding agent, some of the packets can get forwarded to the service managers (241-242). See Col. 6, lines 44-53. The remaining packets get forwarded onto the plurality of servers (220-223). See Col. 6, lines 44 – 48. The appellant does not believe that there exists a network located between the forwarding agent (231) and the servers (220), and relies in part on the idea that since network (210) is labeled as a network, if a network had existed between the forwarding agent and servers, there would have been another network element shown in the figure.

Network “clouds” are used in network disclosure for abstraction purposes. Network 210 is actually a series of routers, switches, ISPs, DNS servers, DHCP servers, plus many more network elements that make up almost every LAN or WAN

network. The cloud is used to clarify that those elements are well known and not necessary to describe Albert's invention. There is no network or network cloud between the forwarding agents and the servers because the disclosure shows how these elements are actually connected. Since the art is disclosing the system and connections, there is no need to describe it as a network cloud because there is no need for abstraction.

In Col. 6, lines 30 – 35, Albert teaches that server that "server 222 may communicate with network 210 through either of the forwarding agents, server 221 communicates with network 210 exclusively through forwarding agent 231, and server 223 communicates with network 210 exclusively through forwarding agent 232." This shows that the connection between the servers and the forwarding agents is not part of network 210, but a separate entity where the communication must go through the agents, and messages cannot travel around the agents into the servers. This teaching further shows that the servers must **communicate with** the agents. The servers are not part of the agents, they exist as separate nodes in the networked system, they must send communications from the server entity to the agent entity through a connection, which is shown as a line in Figure 2A.

The appellant tries to describe this connection the agent and servers being "within the same network." See pg. 11 of appellant's brief. The examiner disagrees with this position, if there are packets traveling from the forwarding agent to the servers through the connection as shown in figure 2A, there is a second network. It is clear from Albert that the connection between the servers and the forwarding agent is

different than the network between the client and the forwarding agents. If there is a different connection, then there are different interfaces and those connections can be considered separate "networks."

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/K. B./

Examiner, Art Unit 2456

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